

CLAIMS

1. A seal for laparoscopic port comprising:  
a base adapted to engage a cannula, the base including an axial aperture for a  
surgical instrument;

5 a multiplicity of jaws mounted on the base, the jaws being movable radially with  
respect to the aperture between an open position wherein a shaft of the surgical instrument  
may pass freely and a closed position wherein the jaws engage said shaft and provide a  
restraining force restraining radial movement of the shaft; and

10 an actuator rotatable to urge the jaws to move between said open position and said  
closed position;

wherein the actuator includes a click stop arrangement adapted to provide  
frictional engagement at a position intermediate the open and closed positions to hold the  
jaws at the intermediate position.

2. A seal as claimed in claim 1 wherein the click stop arrangement  
15 comprises a discontinuity on the actuator arranged to engage a complementary  
discontinuity on the base.

3. A seal as claimed in claim 2 wherein the discontinuity comprises a  
protrusion or recess on the actuator arranged to engage a complementary detent or  
protrusion on the base.

20 4. A seal as claimed in any preceding claim wherein the click stop  
arrangement comprises a protrusion of detent on the jaw adapted to engage a  
complementary formation on the actuator.

5. A seal as claimed in claim 4 wherein the click stop arrangement  
comprises a pin extending from each jaw, the pin being received in a recess in a guide on  
25 the actuator.

BEST AVAILABLE COPY

6 A seal as claimed in any preceding claim wherein each jaw includes a follower movable along a respective guide on the actuator,

the guide having inner and outer ends corresponding to open and closed positions of the jaw,

5 the guide further having an intermediate discontinuity adapted to engage the follower preventing closure of the jaw by providing a closure resisting force greater than said restoring force.

7 A seal as claimed in claim 5 or 6 wherein the guide is an arcuate channel or slot in the actuator.

10 8. A seal as claimed in claim 7 wherein the channel or slot is parabolic or exponential in shape.

9. A seal as claimed in any of claims 5-8 wherein the recess is located on the radial inner surface of the guide.

15 10. A seal as claimed in any preceding claim wherein the jaws are biased radially inwardly.

11. A seal as claimed in claim 10 wherein the jaws engage a lip of the resilient diaphragm and are biased radially inwardly when the diaphragm is dilated

BEST AVAILABLE COPY